NEW FLUOROUS TAGGING AND ACAVENGING REACTANTS AND METHODS OF SYNTHESIS AND USE THEREOF

ABSTRACT

The present invention includes methods and compositions for increasing the fluorous nature of an organic compound by reacting it with at least one fluorous compound to produce a fluorous tagged organic compound. The increased fluorous nature of the fluorous tagged organic compound can then be utilized to separate the fluorous organic compound from untagged reagents, reactants, catalysts and/or products derived therefrom. The resultant fluorous tagged organic compound can be subjected to subsequent chemical transformations, wherein the fluorous nature of the tagged compound is utilized to increase the ease of separation of the fluorous tagged organic compound from untagged reagents, reactants, catalysts and/or products derived therefrom, after each chemical transformation. The chemical transformations result in a second fluorous tagged organic compound wherein the fluorous nature of the second fluorous tagged organic compound can then be reduced by removing the fluorous group therefrom, thereby producing a second organic compound that may be employed as a pharmaceutical compound or intermediate, or a combinatorial library component.